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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,637

02/20/2004

Wenxiao He

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EXAMINER

GARY, ERIKA A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,637

Applicant(s)

HE, WENXIAO

Examiner

Erika A. Gary

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/9/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 9, 17, 25, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokote, US Patent Application Publication Number 2002/0157024 (hereinafter Yokote).

Regarding claims 1, 9, 17, 25, and 33, Yokote discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [paragraph 0013].

3. Claims 1, 9, 17, 25, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Eschbach et al., US Patent Application Publication Number 20023/0088765 (hereinafter Eschbach).

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Regarding claims 1, 9, 17, 25, and 33, Eschbach discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [paragraph 0030].

4. Claims 1, 3-7, 9, 11-15, 17, 19-23, 25, 27-31, 33, and 35-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Thubert et al., US Patent Application Publication Number 2004/0202183 (hereinafter Thubert).

Regarding claims 1, 9, 17, 25, and 33, Thubert discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [abstract; paragraphs 0006, 0015, 0039, 0048].

Regarding claims 3, 11, 19, 27, and 35, Thubert discloses wherein registering the mobile node with the home agent comprises: dispatching a binding update request to the home agent using the security tunnel; and receiving a binding update acknowledgement by way of a reverse path security tunnel [paragraph 0036].

Regarding claims 4, 12, 20, 28, and 36, Thubert discloses discovering an applicable prefix for the home agent using the security tunnel [paragraph 0048].

Regarding claims 5, 13, 21, 29, and 37, Thubert discloses conveying data to a correspondent node using the security tunnel [paragraphs 0035, 0048].

Regarding claims 6, 14, 22, 30, and 38, Thubert discloses communicating a return routability signal to the home agent using the security tunnel [paragraphs 0042, 0045, 0051].

Regarding claims 7, 15, 23, 31, and 39, Thubert discloses establishing a reverse path security tunnel having associated with said tunnel a single security association [paragraphs 0044, 0048].

5. Claims 1, 2, 8-10, 16-18, 24-26, 32-34, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Johansson et al., US Patent Application Publication Number 2002/0080752 (hereinafter Johansson).

Regarding claims 1, 9, 17, 25, and 33, Johansson discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [paragraphs 0114, 0126, 0138].

Regarding claims 2, 10, 18, 26, and 34, Johansson discloses establishing a security tunnel comprises: creating a security policy database for at least one of a binding update message, a return routability message, prefix discovery message and

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payload data packet; and associating two or more security policy databases with a security tunnel using a single security association [paragraphs 0092-0093, 0114].

Regarding claims 8, 16, 24, 32, and 40, Johansson discloses establishing a reverse path security tunnel comprises creating a security policy database for at least one of a binding update message, a return routability message, prefix discovery message and payload data packet; and associating one or more security policy databases with a security tunnel using a single security association [paragraphs 0092-0093, 0114, 0129].

Response to Arguments

6. Applicant's arguments filed July 9, 2007 have been fully considered but they are not persuasive. Applicant argues that Yokote does not teach or suggest registering the mobile node with the home agent using the security tunnel. However, the Examiner respectfully disagrees as the reference teaches that during a registration process, the home agent and mobile node negotiate for a security association that is used for *subsequent* communications [paragraph 0013]. Therefore, the tunnel is established before the registration is complete. Yokote also teaches that when a communication between nodes is initiated, the security association is established first [paragraphs 0049,0054].

Applicant argues that Thubert does not teach or suggest registering the mobile node with the home agent using the security tunnel. However, the Examiner

respectfully disagrees as Thubert teaches that the mobile node registers via a tunnel terminated by the home agent [paragraph 0048].

Applicant argues that Johansson does not teach or suggest registering the mobile node with the home agent using the security tunnel. However, the Examiner respectfully disagrees as Johansson teaches the mobile sends a registration message along with tunnel information. Subsequently, a security association with the home agent is established for traffic sent back [paragraph 0114]. Hence, the security tunnel is established before the registration is complete. The claims do not state that the registration process is not initiated until the security tunnel is already fully established.

The independent claims are also now additionally rejected over Eschbach.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-7841. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAG
August 22, 2007


ERIKA A. GARY
PRIMARY EXAMINER